

WHAT IS CLAIMED IS:

- 1. A composition for regulation of the extracellular matrix economy, comprising a pharmaceutically effective amount of an effector in combination with a pharmaceutically acceptable carrier, wherein regulation of the extracellular matrix economy includes inhibition of expression of collagen $\alpha l(I)$ gene, together with inhibition of transcription of NF- κ B and inhibition of collagenase type IV production.
- 2. The composition of claim 1, wherein regulation of the extracellular matrix economy includes inhibition of expression of collagen $\alpha 1(I)$ gene and promotion of activity of cKrox transcription factor, together with inhibition of transcription of NF- κ B and inhibition of collagenase type IV production.
- 3. The composition of claim λ wherein the regulation of the extracellular matrix economy includes inhibition of expression of collagen $\alpha 1(I)$ gene, and promotion of activity of cKrox, together with inhibition of transcription of NF- κ B and inhibition of collagenase type IV production, and decreasing release of cytokines IL-1 β and TNF α , substantially without affecting expression of TGF- β .
- 4. The composition of claim 1, wherein the regulation of the extracellular matrix economy includes decreasing expression of HSP4V in parallel to inhibition of expression of collagen $\alpha 1(I)$ gene, inhibition of expression of NF- κ B, inhibition of collagenase type IV production, and decreasing release of cytokines IL-1 β and TNF α , substantially without affecting an expression of TGF- β .
- 5. The composition of any of claims 1 to 4, wherein said effector is a quinazolinone derivative.
- 6. The composition of claim 5, wherein said quinazolinone derivative is a member of a group having a formula:

wherein:

R₁ is a member of the group consisting of hydrogen, halogen, nitro, benzo, lower alkyl, phenyl, and lower alkoxy;

 R_2 is a member of the group consisting of hydroxy, acetoxy, and lower alkoxy, and R_3 is a member of the group consisting of hydrogen and lower alkenoxy; and n is either 1 or 2; and pharmaceutically acceptable salts thereof.

- 7. The composition of claim 6, wherein said compound is Halofuginone and pharmaceutically acceptable salts thereof.
- 8. A composition for inhibition of at least one pathological process associated with tissue trauma, comprising a pharmaceutically effective amount of an effector in combination with a pharmaceutically acceptable carrier, wherein said effector regulates the extracellular matrix economy in order to inhibit the at least one pathological process associated with tissue trauma, wherein regulation of the extracellular matrix economy includes inhibition of expression of collagen $\alpha 1(I)$ gene, together with inhibition of transcription of NF- κ B and inhibition of collagenase type IV production.
- 9. The composition of claim 8, wherein regulation of the extracellular matrix economy includes inhibition of expression of collagen $\alpha 1(1)$ gene and promotion of activity of cKrox transcription factor, together with inhibition of transcription of NF- κ B and inhibition of collagenase type IV production.
- 10. The composition of claim 9, wherein the regulation of the extracellular matrix economy includes inhibition of expression of collagen of (I) gene, and promotion of activity of *cKrox*, together with inhibition of transcription of NF-kB,

inhibition of collagenase type IV production and decreasing release of cytokines IL- 1β and TNF α , substantially without affecting expression of TGF- β .

- 11. The composition of claim 8, wherein said effector decreases an expression of HSP47 in parallel to inhibition of expression of collagen $\alpha 1(I)$ gene, inhibits expression of NF- κ B, inhibits collagenase type IV production and decreases release of cytokines IL-1 β and TNF α , substantially without affecting expression of TGF- β .
- 12. The composition of any of claims 8 to 11, wherein said effector is a quinazolinone derivative.
- 13. The composition of claim 12, wherein said quinazolinone derivative is a member of a group having a formula:

$$R^{1}$$
 N R_{2} N_{1} R_{3}

wherein:

R₁ is a member of the group consisting of hydrogen, halogen, nitro, benzo, lower alkyl, phenyl, and lower alkoxy;

 R_2 is a member of the group consisting of hydroxy, acetoxy, and lower alkoxy, and R_3 is a member of the group consisting of hydrogen and lower alkenoxy; and n is either 1 or 2;

and pharmaceutically acceptable salts thereof.

- 14. The composition of claim 13, wherein said effector is Halofuginone and pharmaceutically acceptable salts thereof.
- 15. The composition of any of claims 8 to 14, wherein the at least one pathological process is selected from the group consisting of cancers, fibrotic conditions including but not limited to hepatic fibrosis and cirrhosis, chronic

inflammatory disease, renal fibrosis, pulmonary fibrosis, cardiac fibrosis, neoangiogenesis, formation of adhesions, psoriasis, keloids, hypertrophic scars, and a pathological condition which can be ameliorated, reduced or otherwise treated by an effector capable of regulating the extracellular matrix economy.

of an extracellular matrix, comprising a pharmaceutically effective amount of a compound having a formula:

R₁ is a member of the group consisting of hydrogen, halogen, nitro, benzo, lower alkyl, phenyl and lower alkoxy;

 R_2 is a member of the group consisting of hydroxy, acetoxy and lower alkoxy, and R_3 is a member of the group consisting of hydrogen and lower alkenoxy-carbonyl; n is either 1 or 2;

and pharmaceutically acceptable salts thereof.

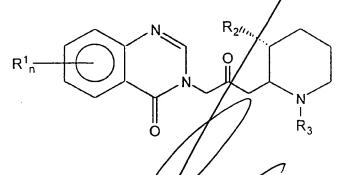
17. A composition for treating cardiac fibrosis, comprising a pharmaceutically effective amount of a compound in combination with a pharmaceutically acceptable carrier, the compound being a member of a group having a formula:

$$R^{1}$$
 N R_{2}/n N N R_{3}/n wherein:

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 R_1 is a member of the group consisting of hydrogen, halogen, nitro, benzo, lower alkyl, phenyl, and lower alkoxy; R_2 is a member of the group consisting of hydroxy, acetoxy, and lower alkoxy; R_3 is a member of the group consisting of hydrogen and lower alkenoxy-carbonyl; and n is either 1 or 2; and pharmaceutically acceptable salts thereof.

- 18. The composition of claim 17, wherein the compound is Halofuginone.
- 19. A method of manufacturing a medicament for treating cardiac fibrosis, comprising the step of placing a pharmaceutically effective amount of a compound in a pharmaceutically acceptable carrier, the compound being a member of a group having a formula:



wherein:

 R_1 is a member of the group consisting of hydrogen, halogen, nitro, benzo, lower alkyl, phenyl, and lower alkoxy; R_2 is a member of the group consisting of hydroxy, acetoxy, and lower alkoxy, R_3 is a member of the group consisting of hydrogen and lower alkenoxy-carbonyl; and n is either 1 or 2; and pharmaceutically acceptable salts thereof.

20. A method for the treatment of cardiac fibrosis in a subject, comprising the step of administering a pharmaceurically effective amount of a compound having a formula:

$$R^1$$
 N R_2 N N R_3 wherein:

 R_1 is a member of the group consisting of hydrogen, halogen, nitro, benzo, lower alkyl, phenyl, and lower alkoxy; R_2 is a member of the group consisting of hydroxy, acetoxy and lower alkoxy, R_3 is a member of the group consisting of hydrogen and lower alkenoxy-carbonyl; and n is either 1 or 2; and pharmaceutically acceptable salts thereof.

21. A composition for substantially preventing cardiac fibrosis, comprising a pharmaceutically effective amount of a compound in combination with a pharmaceutically acceptable carrier, the compound being a member of a group having a formula:

wherein:

 R_1 is a member of the group consisting of hydrogen, halogen, nitro, benzo, lower alkyl, phenyl, and lower alkoxy; R_2 is a member of the group consisting of hydroxy, acetoxy, and lower alkoxy; R_3 is a member of the group consisting of hydrogen and lower alkenoxy-carbonyl; and n is either 1 or 2; and pharmaceutically acceptable salts thereof.

22. A method of manufacturing a medicament for substantially preventing cardiac fibrosis, comprising the step of placing a pharmaceutically effective amount of

a compound in a pharmaceutically acceptable carrier, the compound being a member of a group having a formula:

wherein:

 R_1 is a member of the group confisting of hydrogen, halogen, nitro, benzo, lower alkyl, phenyl, and lower alkoxy R_2 is a member of the group consisting of hydroxy, acetoxy, and lower alkoxy; R_2 is a member of the group consisting of hydrogen and lower alkenoxy-carbonyl; and n is either 1 or 2; and pharmaceutically acceptable salts thereof.

23. A method for substantially preventing cardiac fibrosis in a subject, comprising the step of administering a pharmaceutically effective amount of a compound having a formula:

$$R^{1}$$

wherein:

 R_1 is a member of the group consisting of hydrogen, halogen, nitro, benzo, lower alkyl, phenyl, and lower alkoxy; R_2 is a member of the group consisting of hydroxy, acetoxy and lower alkoxy, R_3 is a member of the group consisting of hydrogen and lower alkenoxy-carbonyl; and n is either 1 or 2; and pharmaceutically acceptable salts thereof.

